#### **PATENT**

# IN THE UNITED STATES PATENT AND TRADEMARK OFFICE BEFORE THE BOARD OF PATENT APPEALS AND INTERFERENCES

Application No.:

10/630,307

Confirmation No.: 9064

Applicant

Joel M. WasDyke

Filed

July 30, 2003

TC/A.U.

3773

Examiner

Bui, Vy Q

Title

SELF-CENTERING BLOOD CLOT FILTER

Docket No.

1001.1681101

Customer No.

28075

#### APPEAL BRIEF FILED UNDER 37 C.F.R. § 41.37

Mail Stop Appeal Brief - Patents Assistant Commissioner for Patents PO Box 1450 Alexandria, VA 22313-1450

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JoAnn Lindman

Dear Sirs:

Pursuant to 37 C.F.R. § 41.37, Appellant hereby submits this Appeal Brief in furtherance of the Notice of Appeal filed on April 23, 2010, and of the Notice of Panel Decision from Pre-Appeal Review dated mailed August 3, 2010. Appellant authorizes the fee prescribed by 37 C.F.R. § 41.20(b)(2) in the amount of \$540 to be charged to Deposit Account No. 50-0413. Permission is hereby granted to charge or credit Deposit Account No. 50-0413 for any errors in fee calculation.

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#### I. REAL PARTY IN INTEREST

The real party in interest is the assignee of record, Boston Scientific Scimed, Inc., a corporation organized and existing under and by virtue of the laws of Minnesota, and having a business address of One Scimed Place, Maple Grove, MN 55311-1566. An assignment from the inventor, Joel M WasDyke, conveying all right, title and interest in the invention to Scimed Life Systems, Inc. has been recorded at Reel 014355, Frame 0643. A subsequent change of name to Boston Scientific Scimed, Inc. has been recorded at Reel 018505, Frame 0868.

#### II. RELATED APPEALS AND INTERFERENCES

There are no other known appeals or interferences that will directly affect, or be directly affected by, or have a bearing on the Board's decision in this appeal.

### III. STATUS OF CLAIMS

Claims 1-36 are pending in the application. Claims 1-12, 23, 25-30, 32, and 35-36 have been canceled from the application.

Claims 13-22, 24, 31, 33, and 34 stand finally rejected under 35 U.S.C. § 102(b), or in the alternative under 35 U.S.C. § 103(a), as being unpatentable over Kleshinski, U.S. Patent No. 5,766,162.

Claim 18 stands finally rejected under 35 U.S.C. § 103(a) as being unpatentable over Kleshinski, U.S. Patent No. 5,766,162, in view of Boylan et al., U.S. Patent No. 6,602,272.

Claim 22 stands finally rejected under 35 U.S.C. § 103(a) as being unpatentable over Kleshinski, U.S. Patent No. 5,766,162, in view of Mazzocchi et al., U.S. Patent No. 6,949,103.

Claims 13-22, 24, 31, and 33-34 of the application are currently being appealed.

#### IV. STATUS OF AMENDMENTS

No amendments subsequent the final rejection of December 31, 2009 have been presented.

### V. SUMMARY OF CLAIMED SUBJECT MATTER\*

The invention relates generally to a blood clot filter comprising an apical head and a plurality of elongated legs attached thereto. Each leg of the plurality of legs has a radially collapsed configuration. Each leg of the plurality of legs includes a proximal bend region which abuts the vessel wall thereby centering the filter in a blood vessel when the filter leg is in a centering configuration. The proximal portion of each leg of the plurality of legs is configured to avoid contact with the vessel wall when the filter leg is in a filtering configuration. Each leg of the filter is actuatable between three configurations: a radially collapsed configuration, a centering configuration, and a filtering configuration.

Turning now to independent claim 13, which is directed to a blood clot filter, comprising: an apical head (see, for example, page 2, lines 16-17, page 4, line 9 to page 5, line 15, page 6, lines16-18, page 10, lines 13-14; Figs. 1, 6, 7; reference numeral 12) defining a central longitudinal axis (see, for example, specification page 4, lines 19-22, page 6, lines 11-13; Fig.1; reference character L); and a plurality of elongated filter legs (see, for example, specification page 2, line 13 to page 4, line 13, page 4, line 8 to page 11, line 2; Figs. 1-6; reference numeral 14) each having a proximal section (see, for example, specification page 4, line 9-11, page 6, lines 11-13; Figs. 1, 3, 4; reference numeral 16) and a distal section (see, for example, specification page 2, lines 18-19, page 3, lines 9-10, page 4, lines 9-11, page 5, lines 18-21, page 6, lines 16-18; Figs. 1-4; reference numeral 18), each of said plurality of elongated filter legs (see, for example, specification page 2, line 13 to page 4, line 13, page 4, line 8 to page 11, line 2; Figs. 1-6; reference numeral 14) formed at least in part of a shape-memory material (see, for

<sup>\*</sup> The references to the specification and drawings provided herein are exemplary, and are not deemed to be limiting as support may be found throughout the specification and in many of the Figures.

example, specification page 2, line 13 to page 3, line 3, page 4, lines 14-18, page 7, line 17 to page 10, line 7) actuatable between a radially collapsed configuration (see, for example, specification page 9, lines 19-21; Fig. 5), a centering configuration (see, for example, specification page 2, lines 13-21, page 3, lines 6-19, page 4, lines 14-18, page 6, lines 10-11, page 7, lines 17-20, page 8, lines 6-9, page 9, line 21 to page 10, line 12), and a filtering configuration (see, for example, specification page 2, lines 13-16, page 3, lines 13-21, page 4, lines 14-18, page 7, lines 17-20, page 8, lines 6-9, page 9, lines 6-16, page 10, line 19 to page 11, line 2; Figs. 4 and 7); wherein the centering configuration (see, for example, specification page 2, lines 13-21, page 3, lines 6-19, page 4, lines 14-18, page 6, lines 10-11, page 7, lines 17-20, page 8, lines 6-9, page 9, line 21 to page 10, line 12) of said plurality of elongated filter legs (see, for example, specification page 2, line 13 to page 4, line 13, page 4, line 8 to page 11, line 2; Figs. 1-6; reference numeral 14) includes a bend region (see, for example, specification page 2, lines 21-24, page 6, line 11 to page 7, line 16, page 10, lines 14-16; Fig. 3 and 6; reference numeral 26) in the proximal section (see, for example, specification page 4, line 9-11, page 6, lines 11-13; Figs. 1, 3, 4; reference numeral 16) forming a pad (see, for example, specification page 2, lines 21-24, page 6, lines 13-16; Fig. 3; reference numeral 28) configured to abut a vessel interior wall to center the filter when placed within a blood vessel; wherein each of the bend regions (see, for example, specification page 2, lines 21-24, page 6, line 11 to page 7, line 16, page 10, lines 14-16; Fig. 3 and 6; reference numeral 26) of each of the elongated filter legs (see, for example, specification page 2, line 13 to page 4, line 13, page 4, line 8 to page 11, line 2; Figs. 1-6; reference numeral 14) extends radially outward from the central longitudinal axis (see, for example, specification page 4, lines 19-22, page 6, lines 11-13; Fig.1; reference character L) at equidistant intervals; wherein the apical head (see, for example, page 2, lines 16-17, page 4, line 9 to page 5, line 15, page 6, lines 16-18, page 10, lines 13-14; Figs. 1, 6, 7; reference numeral 12) is coupled to the proximal section (see, for example, specification page 4, line 9-11, page 6, lines 11-13; Figs. 1, 3, 4; reference numeral 16) of each of said plurality of elongated filter legs (see, for example, specification page 2, line 13 to page 4, line 13, page 4, line 8 to page 11, line 2; Figs. 1-6; reference numeral 14); wherein each filter leg (see, for example, specification page 2, line 13 to page 4, line 13, page 4, line 8 to page 11, line 2; Figs. 1-6;

reference numeral 14) is configured to avoid contact with the vessel wall in the proximal section (see, for example, specification page 4, line 9-11, page 6, lines 11-13; Figs. 1, 3, 4; reference numeral 16) of the filter leg (see, for example, specification page 2, line 13 to page 4, line 13, page 4, line 8 to page 11, line 2; Figs. 1-6; reference numeral 14) in the filtering configuration (see, for example, specification page 2, lines 13-16, page 3, lines 13-21, page 4, lines 14-18, page 7, lines17-20, page 8, lines 6-9, page 9, lines 6-16, page 10, line 19 to page 11, line 2; Figs. 4 and 7).

Turning now to independent claim 24, which is directed to a blood clot filter, comprising: an apical head (see, for example, page 2, lines 16-17, page 4, line 9 to page 5, line 15, page 6, lines 16-18, page 10, lines 13-14; Figs. 1, 6, 7; reference numeral 12) defining a central longitudinal axis (see, for example, specification page 4, lines 19-22, page 6, lines 11-13; Fig.1; reference character L); and a plurality of filter legs (see, for example, specification page 2, line 13 to page 4, line 13, page 4, line 8 to page 11, line 2; Figs. 1-6; reference numeral 14) each having a proximal section (see, for example, specification page 4, line 9-11, page 6, lines 11-13; Figs. 1, 3, 4; reference numeral 16) and a distal section (see, for example, specification page 2, lines 18-19, page 3, lines 9-10, page 4, lines 9-11, page 5, lines 18-21, page 6, lines 16-18; Figs. 1-4; reference numeral 18), the distal section (see, for example, specification page 2, lines 18-19, page 3, lines 9-10, page 4, lines 9-11, page 5, lines 18-21, page 6, lines 16-18; Figs. 1-4; reference numeral 18) of said filter legs (see, for example, specification page 2, line 13 to page 4, line 13, page 4, line 8 to page 11, line 2; Figs. 1-6; reference numeral 14) including attachment means (see, for example, specification page 2, lines 18-19, page 5, line 19 to page 6, line 18, page 7, lines 10-16, page 10, lines 14-16; Figs. 2 and 3; Reference numerals 20, 22) configured to secure the blood clot filter at a first location along the wall of a blood vessel; wherein each of said plurality of filter legs (see, for example, specification page 2, line 13 to page 4, line 13, page 4, line 8 to page 11, line 2; Figs. 1-6; reference numeral 14) is formed at least in part of a shape-memory material (see, for example, specification page 2, line 13 to page 3, line 3, page 4, lines 14-18, page 7, line 17 to page 10, line 7) actuatable between a radially collapsed configuration (see, for example, specification page 9, lines 19-21; Fig. 5), a centering configuration (see, for

example, specification page 2, lines 13-21, page 3, lines 6-19, page 4, lines 14-18, page 6, lines 10-11, page 7, lines 17-20, page 8, lines 6-9, page 9, line 21 to page 10, line 12), and a filtering configuration (see, for example, specification page 2, lines 13-16, page 3, lines 13-21, page 4, lines 14-18, page 7, lines 17-20, page 8, lines 6-9, page 9, lines 6-16, page 10, line 19 to page 11, line 2; Figs. 4 and 7); wherein the centering configuration (see, for example, specification page 2, lines 13-21, page 3, lines 6-19, page 4, lines 14-18, page 6, lines 10-11, page 7, lines 17-20, page 8, lines 6-9, page 9, line 21 to page 10, line 12) of each filter leg (see, for example, specification page 2, line 13 to page 4, line 13, page 4, line 8 to page 11, line 2; Figs. 1-6; reference numeral 14) includes a bend region (see, for example, specification page 2, lines 21-24, page 6, line 11 to page 7, line 16, page 10, lines 14-16; Fig. 3 and 6; reference numeral 26) in the proximal section (see, for example, specification page 4, line 9-11, page 6, lines 11-13; Figs. 1, 3, 4; reference numeral 16) forming a pad (see, for example, specification page 2, lines 21-24, page 6, lines 13-16; Fig. 3; reference numeral 28) configured to abut the wall of the blood vessel at a second location spaced longitudinally apart from the first location to center the filter within the blood vessel; wherein each of the bend regions (see, for example, specification page 2, lines 21-24, page 6, line 11 to page 7, line 16, page 10, lines 14-16; Fig. 3 and 6; reference numeral 26) of each of the filter legs (see, for example, specification page 2, line 13 to page 4, line 13, page 4, line 8 to page 11, line 2; Figs. 1-6; reference numeral 14) extends radially outward from the central longitudinal axis (see, for example, specification page 4, lines 19-22, page 6, lines 11-13; Fig.1; reference character L) at equidistant intervals; wherein each filter leg (see, for example, specification page 2, line 13 to page 4, line 13, page 4, line 8 to page 11, line 2; Figs. 1-6; reference numeral 14) is configured to avoid contact with the wall of the blood vessel in the proximal section (see, for example, specification page 4, line 9-11, page 6, lines 11-13; Figs. 1, 3, 4; reference numeral 16) of the filter leg (see, for example, specification page 2, line 13 to page 4, line 13, page 4, line 8 to page 11, line 2; Figs. 1-6; reference numeral 14) in the filtering configuration (see, for example, specification page 2, lines 13-16, page 3, lines 13-21, page 4, lines 14-18, page 7, lines 17-20, page 8, lines 6-9, page 9, lines 6-16, page 10, line 19 to page 11, line 2; Figs. 4 and 7).

#### VI. GROUNDS OF REJECTION TO BE REVIEWED ON APPEAL

- 1. Whether claims 13-22, 24, 31, 33, and 34 are patentable under 35 U.S.C. § 102(b), or in the alternative under 35 U.S.C. § 103(a), over Kleshinski, U.S. Patent No. 5,766,162.
- 2. Whether claim 18 is patentable under 35 U.S.C. § 103(a) over Kleshinski, U.S. Patent No. 5,766,162, in view of Boylan et al., U.S. Patent No. 6,602,272.
- 3. Whether claim 22 is patentable under 35 U.S.C. § 103(a) over Kleshinski, U.S. Patent No. 5,766,162, in view of Mazzocchi et al., U.S. Patent No. 6,949,103.

#### VII. ARGUMENT

- A. CLAIMS 13-22, 24, 31, 33, AND 34 ARE PATENTABLE OVER KLESHINSKI, U.S. PATENT NO. 5,766,162, UNDER 35 U.S.C. § 102(b), OR IN THE ALTERNATIVE, UNDER 35 U.S.C. § 103(a).
  - 1. A claim is anticipated only if each and every element as set forth in the claim is found, either expressly or inherently described, in a single prior art reference.

The Examiner clearly errs by ignoring the plain language of the claim which states, among other limitations, that:

"each of said plurality of elongated filter legs formed at least in part of a shape-memory material actuatable between a radially collapsed configuration, a centering configuration, and a filtering configuration"

#### and that:

"the centering configuration of said plurality of elongated filter legs includes a bend region in the proximal section forming a pad configured to abut a vessel interior wall to center the filter when placed within a blood vessel"

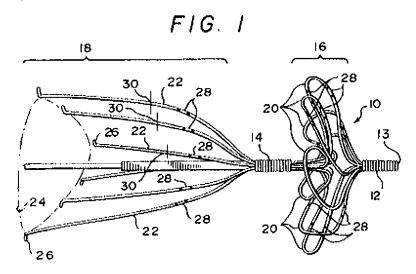
#### and further that:

"each filter leg is configured to avoid contact with the vessel wall in the proximal section of the filter leg in the filtering configuration" (Emphasis added.)

Accordingly, <u>each</u> filter leg has three different configurations and is actuatable between the configurations as recited in independent claim 13 and, *mutatis mutandis*, in claim independent claim 24.

The Examiner asserts in the Advisory Action that "However, the claim languages of the present invention do not exclude the case when the centering configuration defined by filter legs 20 of Kleshinski-'162) and filtering configuration defined by filter legs 22 of Kleshinski-'162 co-exist in a blood vessel." [sic.] As far as Appellant is able to determine the Examiner's intent, the statement appears to be correct. However the asserted case does not correspond to the invention recited in the claims and so is immaterial to patentability.

Kleshinski discloses in Fig. 1, reproduced below for convenience, a double blood clot filter having a first filter basket 16 having seven legs 20 (col. 3, lines 30-32) extending between coils 12 and 14 and a second filter basket 18 having six filter legs 22 (col. 3, lines 45-47) extending proximally from coil 14. To avoid possible confusion, it should be noted that the appearance of reference numerals 28 in both baskets 16 and 18 indicates hinged joints are present in both pluralities of legs and does not indicate continuity of any given leg from one plurality of legs to the other. There can be no misunderstanding that legs 22 are a continuation of legs 20.

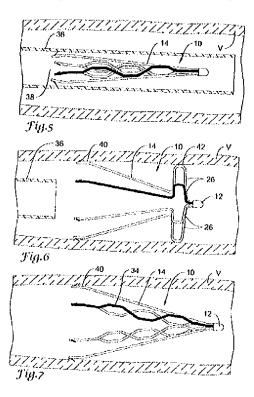


Legs or loops 20 of Kleshinski have a first straightened form which allows them to be passed through a length of plastic tubing. (Col. 3, lines 18-20.) The seven wires 20 (col. 3, line 32), to which Kleshinski refers by the term "loops", have a second filtering configuration in which the "peripheral portions or tips of the loops 20 press outwardly against the inner wall of the vein, although without becoming imbedded in the vein". (Col. 3, lines 40-43.) The function attributed to the loops is to divide the area to be filtered and to help keep the filter in place. There is no disclosed third configuration of the legs/loops 20 in which the loops 20 are deployed and configured to avoid contact with the vessel wall in the filtering configuration. Loops 20 only have a delivery configuration and a filtering configuration, said filtering configuration incidentally providing a degree of centering.

The second filter basket 18 is formed by six free wire ends or legs 22 (col. 3, lines 45-46) which also have a first straightened form allowing them to be passed through a length of plastic tubing. The six wire legs have a second configuration in which the legs diverge from coil 14 and are bowed out to form a circle. (Col. 3, lines 47-50.) The legs 22 serve to orient the device relative to the longitudinal axis of the filter and hooks 26 at the free ends of the legs are intended to engage the wall of the vena cava to prevent migration proximally or distally. Legs 22 do not have a configuration corresponding to the centering configuration in which a bend region formed in the proximal portion of each leg forms a pad configured to abut the vessel wall to center the filter, said bend region being configured to avoid contact with the vessel wall in the filtering configuration. Legs 22 only have a delivery configuration and a filtering configuration, said filtering configuration incidentally providing a degree of centering by virtue of the distance between the vessel wall contacts at the distal sections 18 of legs 22 and the axially displaced contacts between the vessel wall and legs 20, both of which are maintained by the double filter of Kleshinski when the filter is in the filtering configuration.

Accordingly, neither legs 20, having only straightened and filtering configurations, nor legs 22, having only straightened and filtering configurations, anticipate or otherwise render obvious a filter in which each leg is configured to assume the three distinct configurations of pending independent claims 13 and 24.

The three configurations of filter legs 14 may be seen in Figs. 5-7 of the pending application reproduced below for convenience. In each figure one of the legs, the same in each figure, has been highlighted by darkening to emphasize the changes in configuration which the leg undergoes. Fig. 5 illustrates the radially collapsed configuration of a leg. Fig. 6, and Fig. 3, illustrates the centering configuration of a leg following delivery. Fig. 7, and Fig. 4, illustrates the filtering configuration.



As recited in the pending claims, each of the filter legs 14 initially assumes a radially collapsed configuration within the introducer sheath 36 as shown in Fig. 5; each of the filter legs 14 is actuated to assume a centering configuration of Fig. 6 during and/or immediately following ejection from the introducer sheath 36 in which the centering configuration includes a proximal bend region 26 that contacts the vessel wall V to resist tilting of the filter; and after deployment within the body, each of the filter legs 14 assumes a different (filtering) configuration of Fig. 7 in which the proximal bend region 26 is actuated to revert to the filtering configuration in which the proximal bend region of each leg 14 then avoids contact with the vessel wall.

None of the 13 legs of the double filter of Kleshinski assumes three configurations having the recited characteristics. No filter loop/leg of Kleshinski has a

centering configuration in which a proximal bend portion is configured to abut a vessel wall and which is actuatable to a filtering configuration such that the proximal portion avoids contact with the vessel wall.

The Examiner errs in attempting to apply claim terms to inappropriate portions of the legs of the two baskets of Kleshinski and to apply them as though legs 20 and 22 of Kleshinski are continuous such that characteristics of a leg 20 may be attributed to a portion of a leg 22 when convenient and ignored when inconvenient. The entirety of legs 20 and a proximal portion of legs 22 do not combine to form "Proximal sections of filter legs" as asserted in the Final Office Action. The Examiner further errs in asserting that this putative combined proximal section avoids contact with the vessel wall because the proximal region, now defined as only the proximal portion of legs 22 (Prox. sections P in the illustration accompanying the Final Office action at page 3) do not contact the vessel wall. This erroneous shift of the incorrectly applied term "proximal" ignores the continued contact between loops 20 and the vessel wall. Loops 20 of the first basket 16, the putative proximal bend regions, clearly do not avoid contact with the vessel wall in the filtering configuration of the double filter of Kleshinski as illustrated in Fig. 1 and in annotated Fig. 1 as supplied by the Examiner.

Kleshinski fails to disclose each and every element as set forth in the claims and does not do so in as complete detail as is contained in the claim. Appellant respectfully requests that the rejections of independent claims 13 and 24 as anticipated by Kleshinski under 35 U.S.C. § 102(b) be overruled.

#### 2. Conclusion.

For similar reasons as well as others, claims 14-22, 31, 33, and 34, which depend from claims 13 and 24 respectively, and include significant additional limitations, are not anticipated by Kleshinski and Appellant respectfully requests that the rejections be withdrawn.

3. All words in a claim must be considered in judging the patentability of that claim against the prior art.

As discussed above, Kleshinski does not teach all the claim limitations of independent claims 13 and 24, as is required to establish a *prima facie* case of obviousness. Appellant respectfully requests that the rejections be withdrawn.

4. If an independent claim is nonobvious under 35 U.S.C. §103, then any claim depending therefrom is nonobvious.

Claims 14-22, 31, 33, and 34, which depend from nonobvious independent claims 13 and 24, also are nonobvious and Appellant respectfully requests that the rejections be withdrawn.

B. CLAIM 18 IS PATENTABLE OVER KLESHINSKI, U.S. PATENT NO. 5,766,162, IN VIEW OF BOYLAN ET AL., U.S. PATENT NO. 6,602,272 UNDER 35 U.S.C. § 103(a).

As discussed above independent claim 13, from which claim 18 depends, is nonobvious over Kleshinski under 35 U.S.C. § 103(a). The addition of the shape memory material of Boylan does not overcome the deficiencies of Kleshinski as applied to independent claim13 as discussed above. Accordingly claim 18, which depends from nonobvious independent claim 13, also is nonobvious and Appellant respectfully requests that the rejection be overruled.

C. CLAIM 22 IS PATENTABLE OVER KLESHINSKI, U.S. PATENT NO. 5,766,162, IN VIEW OF MAZZOCCHI ET AL., U.S. PATENT NO. 6,949,103. UNDER 35 U.S.C. § 103(a).

As discussed above independent claim 13, from which claim 22 depends, is nonobvious over Kleshinski under 35 U.S.C. § 103(a). The addition of the lubricious coating of Mazzocchi, a limitation not found in claim 13, does not overcome the deficiencies of Kleshinski as applied to independent claim13 as discussed above. Accordingly claim 22, which depends from nonobvious independent claim 13, also is nonobvious and Appellant respectfully requests that the rejection be overruled.

#### D. CONCLUSION

For the reasons stated above, claims 13-22, 24, 31, 33, and 34 are not anticipated by Kleshinski; claims 13-22, 24, 31, 33, and 34 are not obvious over Kleshinski; claim 18 is not obvious over Kleshinski in view of Boylan; claim 22 is not obvious over Kleshinski in view of Mazzocchi; and the Examiner's rejections of claims 13-22, 24, 31, and 33-34 under 35 U.S.C § 102 and § 103 should be overruled.

Date: Mg, 26, 2010

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#### VIII. CLAIMS APPENDIX

#### 1-12. (Canceled)

13. A blood clot filter, comprising:

an apical head defining a central longitudinal axis; and

a plurality of elongated filter legs each having a proximal section and a distal section, each of said plurality of elongated filter legs formed at least in part of a shape-memory material actuatable between a radially collapsed configuration, a centering configuration, and a filtering configuration;

wherein the centering configuration of said plurality of elongated filter legs includes a bend region in the proximal section forming a pad configured to abut a vessel interior wall to center the filter when placed within a blood vessel;

wherein each of the bend regions of each of the elongated filter legs extends radially outward from the central longitudinal axis at equidistant intervals;

wherein the apical head is coupled to the proximal section of each of said plurality of elongated filter legs;

wherein each filter leg is configured to avoid contact with the vessel wall in the proximal section of the filter leg in the filtering configuration.

- 14. The blood clot filter of claim 13, further comprising attachment means on the distal section of each filter leg for securing the blood clot filter to the blood vessel.
- 15. The blood clot filter of claim 14, wherein said attachment means comprises a hook.
- 16. The blood clot filter of claim 13, wherein said shape-memory material is superelastic.
- 17. The blood clot filter of claim 16, wherein said shape-memory material comprises a nickel-titanium alloy.

- 18. The blood clot filter of claim 13, wherein said shape-memory material is selected from the group consisting of silver-cadmium, gold-cadmium, gold-copper-zinc, copper-aluminum-nickel, copper-gold-zinc, copper-zinc, copper-zinc-aluminum, copper-zinc-tin, copper-zinc-silicon, iron-beryllium, iron-nickel-titanium-cobalt, iron-platinum, indium-thallium, iron-manganese, nickel-titanium-cobalt, or copper-tin.
- 19. The blood clot filter of claim 13, wherein said shape-memory material is configured to transform from martensite to austenite at body temperature.
- 20. The blood clot filter of claim 13, wherein said shape-memory material is configured to transform from martensite to austenite below body temperature.
- 21. The blood clot filter of claim 13, wherein said shape-memory material is configured to transform from martensite to austenite above body temperature.
- 22. The blood clot filter of claim 13, wherein said blood clot filter includes a lubricious coating.
  - 23. (Canceled)
  - 24. A blood clot filter, comprising:

an apical head defining a central longitudinal axis; and

a plurality of filter legs each having a proximal section and a distal section, the distal section of said filter legs including attachment means configured to secure the blood clot filter at a first location along the wall of a blood vessel;

wherein each of said plurality of filter legs is formed at least in part of a shapememory material actuatable between a radially collapsed configuration, a centering configuration, and a filtering configuration;

wherein the centering configuration of each filter leg includes a bend region in the proximal section forming a pad configured to abut the wall of the blood vessel at a

second location spaced longitudinally apart from the first location to center the filter within the blood vessel;

wherein each of the bend regions of each of the filter legs extends radially outward from the central longitudinal axis at equidistant intervals;

wherein each filter leg is configured to avoid contact with the wall of the blood vessel in the proximal section of the filter leg in the filtering configuration.

25-30. (Canceled)

31. The blood clot filter of claim 13, wherein the blood clot filter includes six filter legs, wherein the bend regions of the filter legs are arranged at equidistant 60 degree intervals.

32. (Canceled)

- 33. The blood clot filter of claim 24, wherein the blood clot filter includes six filter legs, wherein the bend regions of the filter legs are arranged at equidistant 60 degree intervals.
- 34. The blood clot filter of claim 24, wherein the apical head is coupled to the proximal section of each of said plurality of filter legs.

35-36. (canceled)

# IX. EVIDENCE APPENDIX

No additional evidence has been presented.

Χ.	RELATED	<b>PROCEEDINGS</b>	APPENDIX

None.